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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,906	09/25/2003	Kei-Hsiung Yang	TSA120.004AUS	9188

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EXAMINER	
KIM, RICHARD H	

ART UNIT	PAPER NUMBER
2871	

NOTIFICATION DATE	DELIVERY MODE
07/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/672,906	Applicant(s) YANG	
	Examiner Richard H. Kim	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/20/07 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 28-30, 37 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Noh et al. (US 6,646,707 B2) in view of Choi et al. (US 6,429,918 B1).

Referring to claims 21 and 30, Noh et al. discloses a device comprising a first substrate (col. 3, line 46, 47); a plurality of scan lines (21) located on the first substrate; a plurality of video data lines (23) located on the first substrate and arranged to cross the scan lines, wherein any adjacent scan lines and any adjacent video lines define a pixel region (col. 3., line 47), the pixel region comprising a common electrode line (30); and a plurality of pixel electrodes (29) located at the pixel region, wherein the pixel electrode is divided into a plurality of sub pixel

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electrodes (sub pixel electrodes defined and separates by S1 in Figure 6); a closed slit (S1) is located between adjacent sub pixel electrodes, and the portion of the common electrode line (30) is under the slit (S1); and the slit (S1) is located within the common electrode (30). Noh et al. further discloses a second substrate corresponding to the first substrate (col. 4, lines 5-16). However, the reference fails to disclose a conductor electrode disposed on the second substrate.

Choi et al. discloses a conductor electrode formed on a second substrate (Fig. 3, ref. 37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a conductor electrode disposed on the second substrate since one would be motivated to reduce the generation of parasitic electric fields (col. 6, lines 7-10).

Referring to claims 28 and 37, Noh et al. discloses that a portion of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure (Fig. 6, ref. 30, 29). A capacitance would naturally occur between the overlapping pixel and common electrodes.

Referring to claims 29 and 38, Noh et al. discloses that the pixel electrode is formed from an ITO or IZO material (col. 3, line 52).

3. Claims 22-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Noh et al. and Choi et al. in view of Kim et al. (US 6,771,343 B2).

Noh et al. and Choi et al. discloses the device previously recited, but fails to disclose that the common electrode line is expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under the closed slit, and is symmetric, wherein the

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portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure.

Kim et al. discloses a device comprising a common electrode line expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under the slit; and is symmetric, wherein the portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure (Fig. 1a, ref. 30-34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a common electrode line is expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under the closed slit, and is symmetric, wherein the portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure since one would be motivated to prevent electric field of a gate line and a data line from influencing on the electric field in a domain (col. 1, lines 61-64).

Response to Arguments

4. Applicant's arguments with respect to claims 21, 28-30, 37 and 38 have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments in regard to claims 22-27 and 31-36 filed 6/20/07 have been fully considered but they are not persuasive.

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6. In response to Applicant's argument that because Noh discloses required slanted slits in order to achieve its intended purpose, and Kim discloses straight slits, that a skilled person would not have considered to combine Noh and Kim because the slit structures of the two devices are incompatible with each, Examiner respectfully disagrees. Kim was incorporated in order to meet the limitations regarding the specifics of the common electrode line, not the slits. Kim discloses the specifics of the common electrode and motivation to incorporate the specifics of the common electrode was provided in the above rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Richard H Kim

Examiner

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RHK